

Message

From: Yeow, Aaron [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=613120791828428B8CBFD6178910D97E-YEOW, ARRON]
Sent: 10/17/2018 5:27:00 PM
To: tcoxdenver@aol.com
Subject: RE: CASAC PM ISA
Attachments: PM ISA TOC.pdf

Tony,

Deliberative Process / Ex. 5

SUPPLEMENTAL CHARGE QUESTIONS FOR SCIENTIFIC REVIEW OF THE ISA

To supplement the standardized questions, and guide the scientific review of this ISA, the EPA has identified these areas for CASAC review and comment:

- Please comment on the identification, evaluation and characterization of the available scientific evidence from epidemiologic, controlled human exposure, toxicological and associated human exposure and atmospheric sciences studies and the application of information from these studies to inform causality determinations **and uncertainty characterizations** for human health outcomes.
 - **Atmospheric Sciences (Chapter 2) – Dr. Masuca**
 - **Exposure (Chapter 3) – Dr. Boylan**
 - **Dosimetry and Health Effects (Chapters 4-12, Appendix 1) – Drs. Frampton (lead author), Lange, Packham**
- Please comment on the identification, evaluation and characterization of the available scientific evidence from studies of PM on non-ecological welfare effects of visibility impairment, climate, and materials and the application of information from these studies to inform causality determinations **and uncertainty characterizations** for these welfare outcomes. – **Dr. Lewis**
- The Executive Summary is intended to provide a concise synopsis of the key findings and conclusions of the PM ISA for a broad range of audiences. Please comment on the clarity with which the Executive Summary communicates the key information from the PM ISA. Please provide recommendations on information that should be added or information that should be left for discussion in the subsequent chapters of the PM ISA. – **Dr. Cox (lead author) and CASAC Members**
- Chapter 1 presents an integrated summary and the overall conclusions from the subsequent detailed chapters of the PM ISA and characterizes available scientific information on policy-relevant issues. Please comment on the

usefulness and effectiveness of the summary presentation. Please provide recommendations on approaches that may improve the communication of key findings to varied audiences and the synthesis of available information across subject areas. What information should be added or is more appropriate to leave for discussion in the subsequent detailed chapters? – **Dr. Cox (lead author) and CASAC Members**

Let's chat when you get back on Thursday. I'm attaching the ISA Table of Contents for your reference (in case you did not download the full document).

-Aaron

Aaron Yeow, M.P.H.
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From: tcoxdenver@aol.com [mailto:tcoxdenver@aol.com]
Sent: Wednesday, October 17, 2018 1:06 AM
To: Yeow, Aaron <Yeow.Aaron@epa.gov>
Subject: Re: CASAC PM ISA

Ok, how about the following? We can put everything in the Supplemental Charge Questions section and break out that first question as you suggest. A first crack at doing so follows.

Best,

-- Tony

SUPPLEMENTAL CHARGE QUESTIONS FOR SCIENTIFIC REVIEW OF THE ISA

To supplement the standardized questions, and guide the scientific review of this ISA, the EPA has identified these areas for CASAC review and comment:

- Please comment on the identification, evaluation and characterization of the available scientific evidence from epidemiologic studies and health risk assessments and the application of information from these studies to inform estimates of causal exposure-response relationships, causal effect sizes, and uncertainty characterizations for human health outcomes. Does new epidemiological evidence (data or analyses) developed since the last review indicate that the current primary and/or secondary NAAQS need to be revised to protect human health with an adequate margin of safety? If so, what specific new epidemiological data and risk analyses have been developed that indicate a need for change? How do they address uncertainty, causality, and validation?

Conversely, does new scientific evidence (data or analyses) developed since the last review indicate that the current primary and/or secondary NAAQS do not need to be revised to protect human health with an adequate margin of safety? If so, what specific new data and risk analyses have been developed that indicate no need for change? How do they address uncertainty (especially, model uncertainty and exposure estimation

uncertainty), causality (especially, manipulative causality), and validation (possibly including results of accountability studies)?

- Please comment on the identification, evaluation and characterization of the available scientific evidence from controlled human exposure studies and the application of information from these studies to inform estimation of causal effects of PM_{2.5} on human health and uncertainty characterizations for human health outcomes at current and potential future exposure levels.
- Please comment on the identification, evaluation and characterization of the available scientific evidence from toxicological and associated human exposure and atmospheric sciences studies and the application of information from these studies to inform estimation of causal effects of PM_{2.5} on human health and uncertainty characterizations for human health outcomes at current and potential future exposure levels.

Please comment on the identification, evaluation and characterization of the available scientific evidence from studies of PM on non-ecological welfare effects of visibility impairment, climate, and materials and the application of information from these studies to estimation of causal effects and uncertainty characterizations for these welfare outcomes.

The Executive Summary is intended to provide a concise synopsis of the key findings and conclusions of the PM ISA for a broad range of audiences. Please comment on how well it communicates the key information from the PM ISA. Please recommend information that should be added or left for discussion in the subsequent chapters of the PM ISA.

Chapter 1 presents an integrated summary and the overall conclusions from the subsequent detailed chapters of the PM ISA and characterizes available scientific information on policy-relevant issues. Please comment on its usefulness and effectiveness and recommend approaches that may improve the communication of key findings to varied audiences and the synthesis of available information across subject areas. What information should be added or is more appropriate to leave for discussion in the subsequent detailed chapters?

-----Original Message-----

From: Yeow, Aaron <Yeow.Aaron@epa.gov>

To: [tcxdenver](mailto:tcxdenver@aol.com) <tcxdenver@aol.com>

Sent: Tue, Oct 16, 2018 11:18 am

Subject: RE: CASAC PM ISA

Tony,

Thanks for the quick turnaround on this. As you stated, the standardized charge questions are pretty much set since they are in the Back to Basics NAAQS Memo. It's unfortunate OAR never sought CASAC's thoughts regarding that as your comments/edits would probably provide some clarity. However, I'm not sure this is the place to provide those comments, as these questions are provided here as a backdrop. Also ORD is the office in charge of the ISA, not the standardized charge questions (which would be OAR), so ORD really isn't in a position to edit those. I think your comments on the ISA-specific questions are fine, but we should give some consideration as to how we would structure our meeting/discussion/report based on the charge questions. Charge question 1 basically hits at the meat of the entire document and we should give some thought as to whether we can break that up a little to provide some structure – focus on each discipline/chapter in an ordered way (ambient concentrations, then exposure, then dosimetry/controlled human exposures, then epi, etc.) Otherwise you will have one member talking about ambient concentrations, then the next member talking about epi, etc. It could lead to difficulty in getting a focused discussion. Also this way we can assign each member a specific task according to their area of expertise.

-Aaron

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From: tcoxdenver@aol.com [<mailto:tcoxdenver@aol.com>]
Sent: Monday, October 15, 2018 6:51 PM
To: Yeow, Aaron <Yeow.Aaron@epa.gov>
Subject: Re: CASAC PM ISA

Aaron, for your eyes only, I have drafted the changes I would ideally like to see in the charge questions. Most of them are additions/refinements to the standardized charge questions. The transmittal draft letter just provides those as a reminder, so they are not really subject to change in that context. But if EPA is comfortable adding to and refining those standardized charge questions, I'd be glad to have the charge questions specifically for PM2.5 revised along the lines I have suggested (mainly to make sure that causality, uncertainty characterization, and validation are addressed carefully and explicitly).

This is a rough draft for you only; I am happy to discuss and revise further. (However, I have a long flight to Hawaii on Tuesday, testifying on Wednesday, back in Denver Thursday PM.)

Best,

-- Tony

-----Original Message-----

From: Yeow, Aaron <Yeow.Aaron@epa.gov>
To: [tcoxdenver](mailto:tcoxdenver@aol.com) <tcoxdenver@aol.com>
Sent: Mon, Oct 15, 2018 9:58 am
Subject: CASAC PM ISA

Tony,

I was just notified that EPA NCEA will be transmitting the PM ISA to CASAC today and they will be posting it to their website today. Attached is the draft charge. Please review the charge and let me know if you have any comments/edits that you would like them to make by Monday, 10/22/18. They will then finalize and post the charge questions.

Once the charge questions are finalized, we will need to make lead author/lead discussant assignments to the CASAC. We typically will assign one or more members to each charge question and they will be responsible for leading the discussion of the response to the charge question during the meeting (lead discussant) and for capturing the consensus discussions into a written response for the report (lead author). Once we make the assignments, we would capture this in a Chair's memo sent to the CASAC and transmit the draft ISA and charge questions to the CASAC. We would ask them

for preliminary written comments by December 5 so that you all have time to review each other's comments prior to the meeting. I'm attaching a sample chairs memo.\

Please call me when you get a chance.

-Aaron

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